



## Client SSD: CS - Series

# CSN-12 & CSS-12: Commercial Solutions for Classified Ready PCIe Gen 3 and SATA III SED SSDs

### Product Overview

The RedData CSN-12 and CSS-12 client-class Solid State Drives (SSDs) are designed for laptops and edge devices. These SSDs come in both M.2-2280 and 2.5" form factors and support a wide-temperature option for ruggedized use cases. The CS-series SSDs implement Self-Encrypting Drive (SED) technology offering built-in security to protect all data stored on the device. It delivers reliable data-at-rest security by transparently encrypting all data with hardware-based XTS-AES-256 full-disk encryption, combined with access controls and Cryptographic Erase functionality. The device is compliant with the Trusted Computing Group Storage Opal SSC 2.0 specification. Common Criteria/NIAP security evaluation and NSA CSfC Hardware FDE Approved Products listing are planned for Summer 2026.



### Product Features

<i>Sequential Read</i>	Up to 3,400 MB/s (NVMe) Up to 550 MB/sec (SATA)
<i>Sequential Write</i>	Up to 3,000 MB/s (NVMe) Up to 530 MB/s (SATA)
<i>Random Read</i>	Up to 640,000 IOPS (NVMe) Up to 99,000 IOPS (SATA)
<i>Random Write</i>	Up to 640,000 IOPS (NVMe) Up to 89,000 IOPS (SATA)
<i>Interface</i>	PCIe Gen3 x4 NVMe 1.3 SATA III – 6Gb/s
<i>Security Features</i>	AES256-XTS data encryption Tamper-evidence using an epoxy resin TCG Opal SSC 2.0 Crypto Erase FIPS140-3 level 2 pending Common Criteria/NIAP cPP for FDE v2.0 in-progress

<b>Form Factor</b>	M.2-2280 & 2.5"
<b>Capacity</b>	M.2-2280: 256GB, 512GB, 1TB, and 2TB 2.5": 256GB, 512GB, 1TB, 2TB, and 4TB
<b>MTBF</b>	1.8 million hours
<b>Power Consumption</b>	Max: <6.3W Idle: <34mW L1.2: 2mW (PCIe) DEVSLP < 5mW (SATA)
<b>Temperature</b>	Operating: 0°C ~ 70°C / -25°C ~ 85°C
<b>Features</b>	End-to-End Data Path Protection 3rd generation LDPC ECC & RAID ECC DDR ECC engine
<b>Country of Origin</b>	Taiwan: TAA compliant (Optional) US: ITAR, AS9100, ISO 14001 certified facility
<b>Warranty</b>	Limited 3 years, blackhole available

- 1 GB = 1,000,000,000 bytes.
- Performance differs based on flash configuration and platform
- Sequential Performance is based on FIO on Linux, 128K, with QD=32, 1 worker, and test drive set as secondary.
- Random Performance is based on FIO on Linux, 4K data size, QD=32, 1 worker, 4K aligned.
- Power consumption is measured during the sequential read/write and random read/write operations performed by iometer
- The results of DWPD are obtained in compliance with JESD219A Standards.

Product Configurations					
Interface	Form Factor	Security	Capacity	Wide Temp	Part Number
PCIe Gen3 NVMe 1.3	M.2 2280	SED Opal SSC NIAP pending FIPS140-3 Pending CSfC Pending	256GB		RD60CDE3M2228025A
				Yes	RD60CDE3M22200i25A
			512GB		RD60CDE3M2228051A
				Yes	RD60CDE3M22280i51A
			1TB		RD60CDE3M2228001B
				Yes	RD60CDE3M22280i01B
			2TB		RD60CDE3M2228002B
				Yes	RD60CDE3M22280i02B

Interface	Form Factor	Security	Capacity	Wide Temp	Part Number
SATA III 6Gb/s	M.2 2280	SED Opal SSC NIAP pending FIPS140-3 Pending CSfC Pending	256GB		RD60CDA3M2228025A
				Yes	RD60CDA3M22280i25A
			512GB		RD60CDA3M2228051A
				Yes	RD60CDA3M22280i51A
			1TB		RD60CDA3M2228001B
				Yes	RD60CDA3M222980i01B
			2TB		RD60CDA3M2228002B
				Yes	RD60CDA3M22280i02B
SATA III 6Gb/s	2.5 inch	SED Opal SSC NIAP pending FIPS140-3 Pending CSfC Pending	256GB		RD60CDA32525A
				Yes	RD60CDA325i25A
			512GB		RD60CDA32551A
				Yes	RD60CDA325i51A
			1TB		RD60CDA32501B
				Yes	RD60CDA325i01B
			2TB		RD60CDA32502B
				Yes	RD60CDA325i02B
			4TB		RD60CDA32504B
				Yes	RD60CDA325i04B

For more information, please contact us at: [inquiries@rpics.com](mailto:inquiries@rpics.com).

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